

IN THE CLAIMS:

The following is a complete listing of the claims, and replaces all earlier listings and all earlier versions.

1. (Currently Amended) An image processing apparatus comprising:
extraction means for extracting a pixel signal of an image pickup means that has a plurality of pixels, and for determining positional information of defective pixels based on the pixel signal;

block-forming means for judging whether a plurality of the defective pixels are adjacent to each other on the basis of the positional information of the defective pixels, encoding the adjacent defective pixels which are continuously located in one direction by using run-length codes which are information on the plurality's first coordinate values and lengths and for extracting regional information of the adjacent defective pixels and dividing each of the adjacent defective pixels into groups;

storage means for storing the run-length codes; [the extracted regional information of the adjacent defective pixels each said groups;] and

correction means for correcting said defective pixels by using peripheral pixels of the defective pixels,

wherein said correction means integrate the run-length codes into region information of the defective pixels which are adjacent to each other, and

wherein said correction means do not use the other defective pixels of the group to correct said defective pixels based on said regional information of the group in a

~~case in which the defective pixels in the group are corrected~~ based on the regional information.

2. - 30. (Cancelled).

31. (Previously Presented) An image processing apparatus according to claim 1, wherein said block-forming means expresses the position and the width of the defective pixels adjacent in one direction using run-length coding.

32. (Previously Presented) An image processing apparatus according to claim 1, wherein said correction means takes a pixel region necessary to correct the adjacent defective pixels from an output image of the image pickup means and corrects those defective pixels by using pixels in that pixel region by using the regional information.

33. (Previously Presented) An image processing apparatus according to claim 1, wherein said extraction means judges pixels defective when the value of the pixel signal is within a predetermined range and determines the positional information of the defective pixels.

34. (Cancelled)

35. (Currently Amended) An image processing method comprising:

a first step, of extracting a pixel signal of image pickup means having a plurality of pixels and determining positional information of defective pixels based on the pixel signal;

a second step, of judging whether a plurality of defective pixels are adjacent to each other on the basis of the positional information of defective pixels, encoding the adjacent defective pixels which are continuously located in one direction by using run-length codes which are information on the plurality's first coordinate values and lengths ~~and for extracting regional information of adjacent defective pixels and dividing each of the adjacent defective pixels into groups;~~

a third step, of storing the run-length codes ~~a regional information of each said group;~~ and

a fourth step, of correcting the defective pixels by using peripheral pixels of the defective pixels,

wherein, in said fourth step, run-length codes are integrated into region information of the defective pixels which are adjacent to each other, and [the other defective pixels of the group are not used to correct said defective pixels based on said regional information of the group in a case in which the defective pixels in the group are corrected]

wherein said fourth step is performed without using the other defective pixels based on the region information.

36. (Cancelled).

37. (Currently Amended) A storage medium storing a program which comprises:

a first step, of extracting a pixel signal of image pickup means having a plurality of pixels and determining positional information of defective pixels based on the pixel signal;

a second step, of judging whether a plurality of defective pixels are adjacent to each other on the basis of the positional information of defective pixels, encoding the adjacent defective pixels which are continuously located in one direction by using run-length codes which are information on the plurality's first coordinate values and lengths and ~~for extracting regional information of adjacent defective pixels and dividing each of the adjacent defective pixels into groups;~~

a third step, of storing the run-length codes ~~a regional information of each~~ said group; and

a fourth step, of correcting the defective pixels by using peripheral pixels of the defective pixels,

wherein, in said fourth step, run-length codes are integrated into region information of the defective pixels which are adjacent to each other, and [the other defective pixels of the group are not used to correct said defective pixels based on said regional information of the group in a case in which the defective pixels in the group are corrected]

wherein said fourth step is performed without using the other defective pixels based on the region information.